U.S. Department of Agriculture
National Agricultural Statistics Service (NASS)
Oregon Field Office

Oregon Hazelnut Production Forecast

August 26, 2010

Quick Facts about the 2010 Hazelnut Objective Yield (HOY) Survey

- Total sample size = 180 samples
  - 1 sample = 1 orchard
  - 2 trees per orchard
  - 90 samples carried from last year
  - 90 samples painted this year
  - Of the 180 samples, 176 were usable
- Total nuts picked = 70,805
  - Of those, 15,851 were sub-sampled
  - 77.7% of sub-sampled nuts were good (12,316 nuts)

- **Sampling stage:** nuts are counted and sub-sampled

- **Peeling stage:** leaves are peeled away from the shell

- **Sizing stage:** nuts are passed through the smallest possible sizing hole

- **Cracking and weighing:** This is where good nuts are separated from defective nuts. Good nuts are weighed, defective nuts discarded.

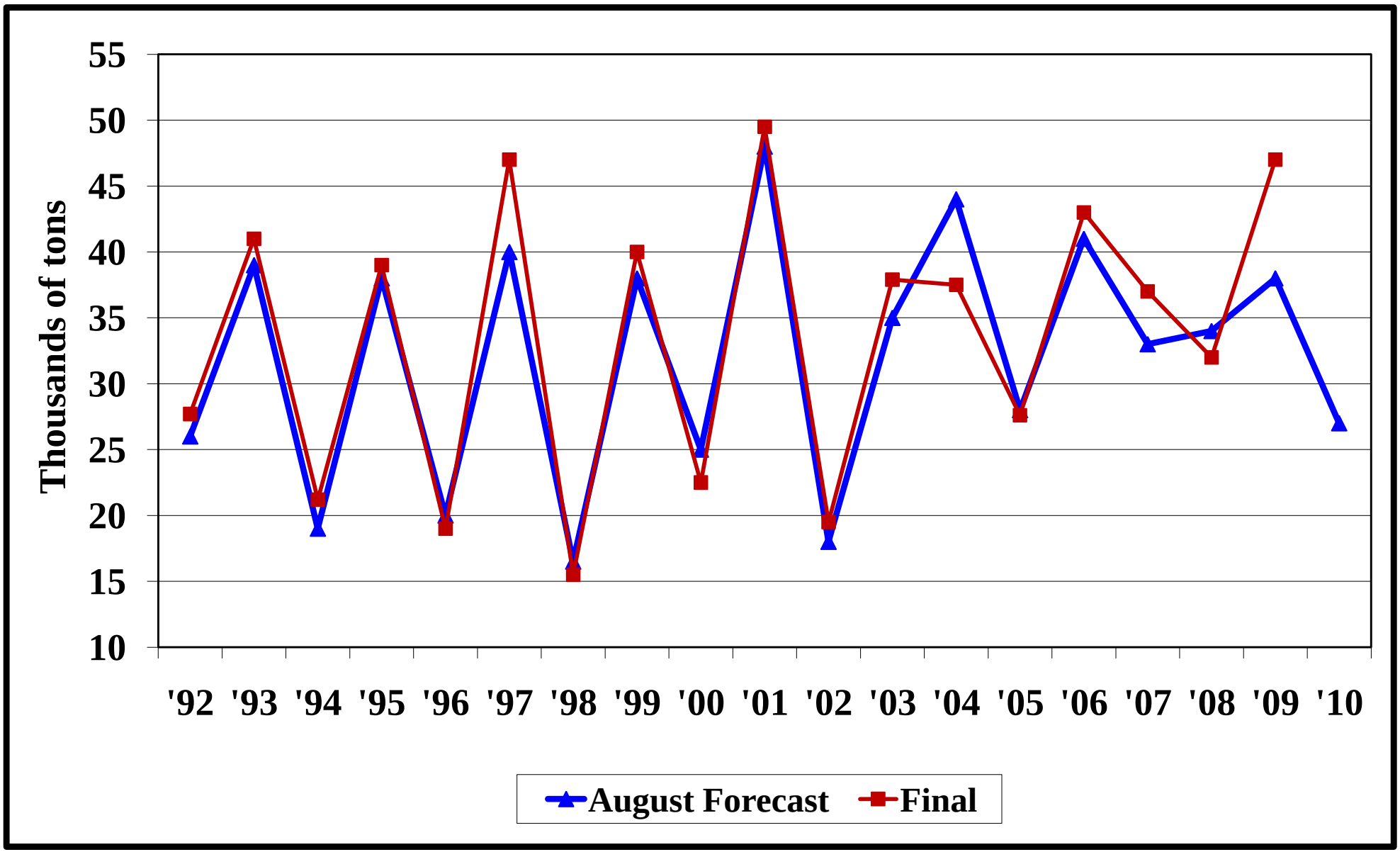
Oregon Hazelnut Production

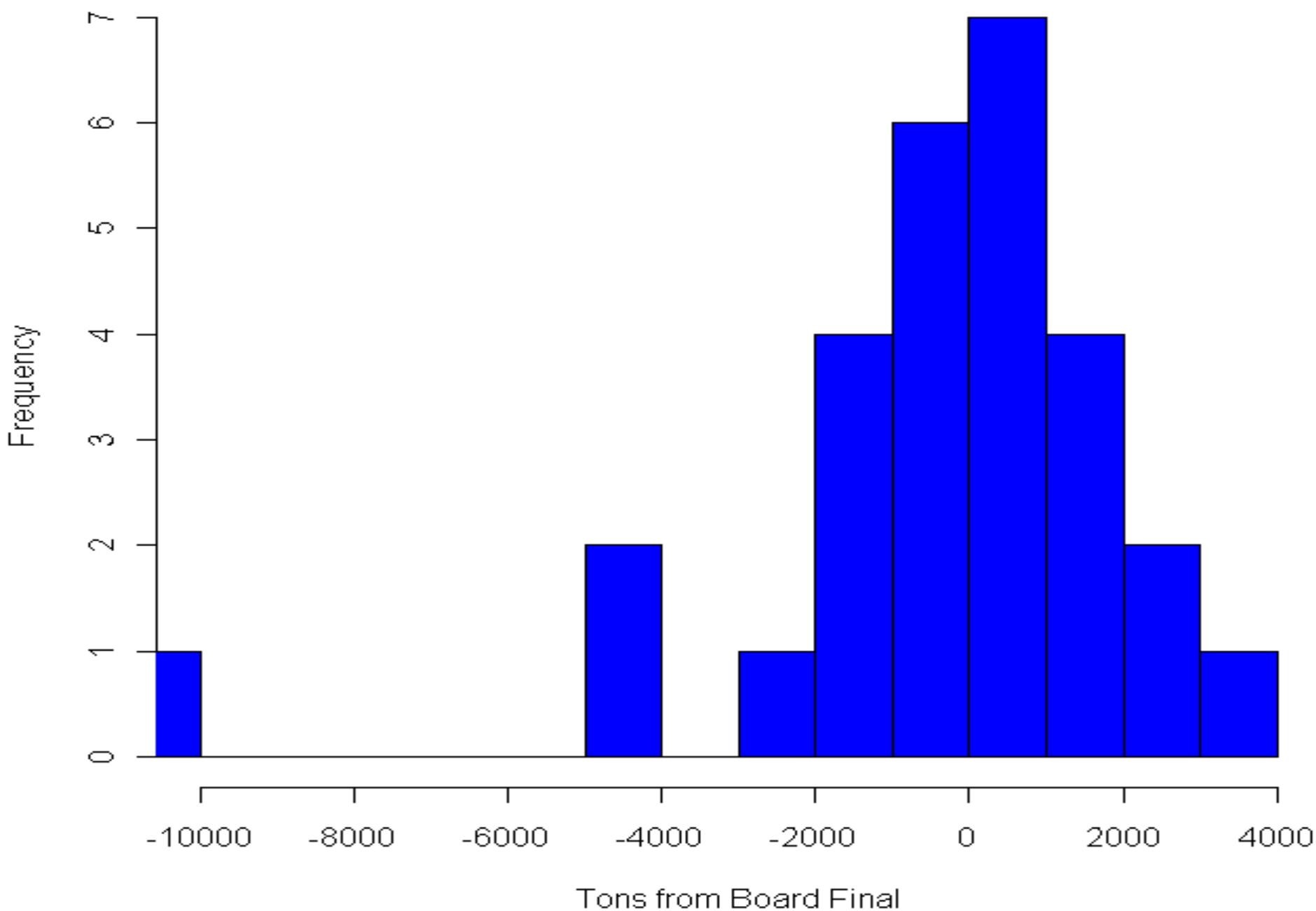
-Released August 24, 2010-

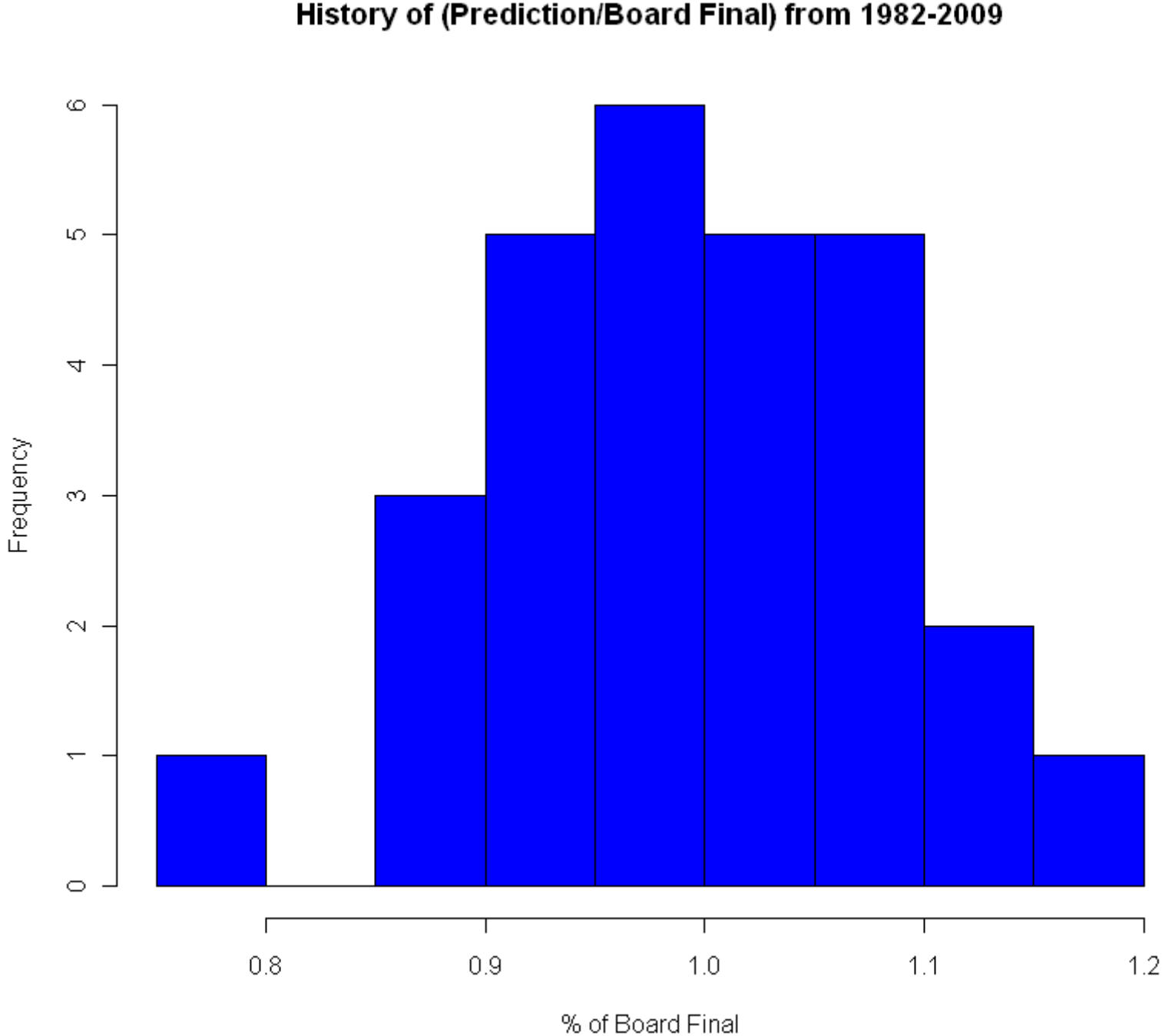
2006	2007	2008	2009	2010 forecast	Pct. Chg.
Tons	*Tons*	*Tons*	*Tons*	*Tons*	*Pct.*
43,000	**37,000**	**32,000**	**47,000**	**27,000**	**-43**

Hazelnut Production

Forecast vs. Final

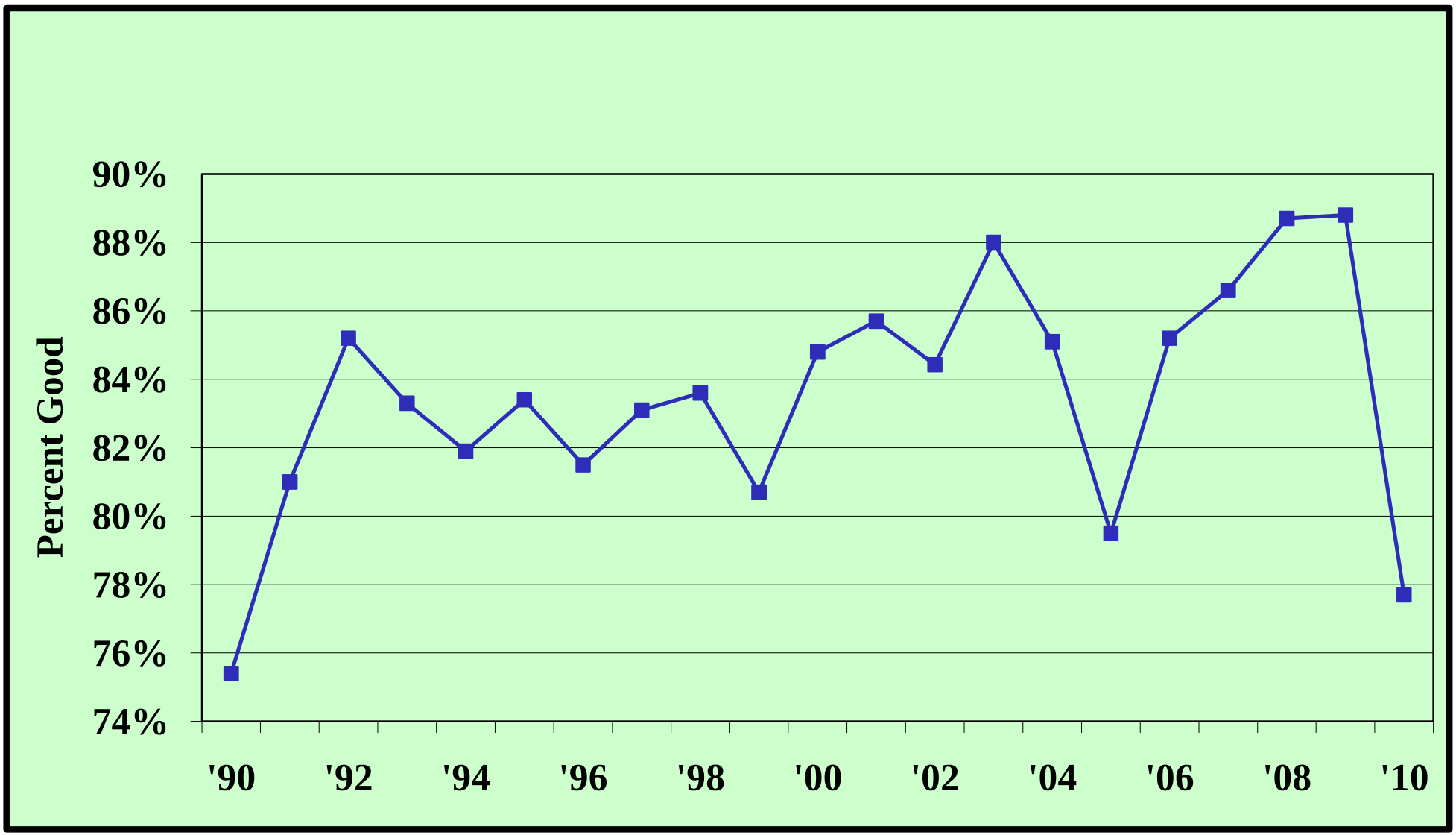



History of (Prediction - Board Final) from 1982-2009
Frequency
0
1
2
3
4
5
6
7
-10000
-8000
-6000
-4000
-2000
0
2000
4000
Tons from Board Final


History of (Prediction/Board Final) from 1982-2009
Frequency
0
1
2
3
4
5
6
0.8
0.9
1.0
1.1
1.2
% of Board Final

Percentage Good Nuts

Hazelnut Objective Yield Lab



- **Example of a good nut**

Defective Nuts

- A nut is considered *defective* if there is no possibility of maturing into a healthy nut:
  - White and mushy inside with no nut
  - Brown stain nuts are like chocolate inside, with no nut at all
  - Nut is shriveled like a raisin
  - Nut is concave/sunken/dimpled
  - Nut is immeasurably small
  - Size threshold for good nuts: If one could recognize with the naked eye that the nut is a healthy shape (none of the traits listed above)
  - In all size groups, the nut in the shell was sometimes very tiny. These were counted as *good nuts* if they could potentially mature even for a late harvest.

- Example of milky white contents with no nut

- Example of a concave nut

- **More concave nuts**

- **Example of a nut with brown stain**

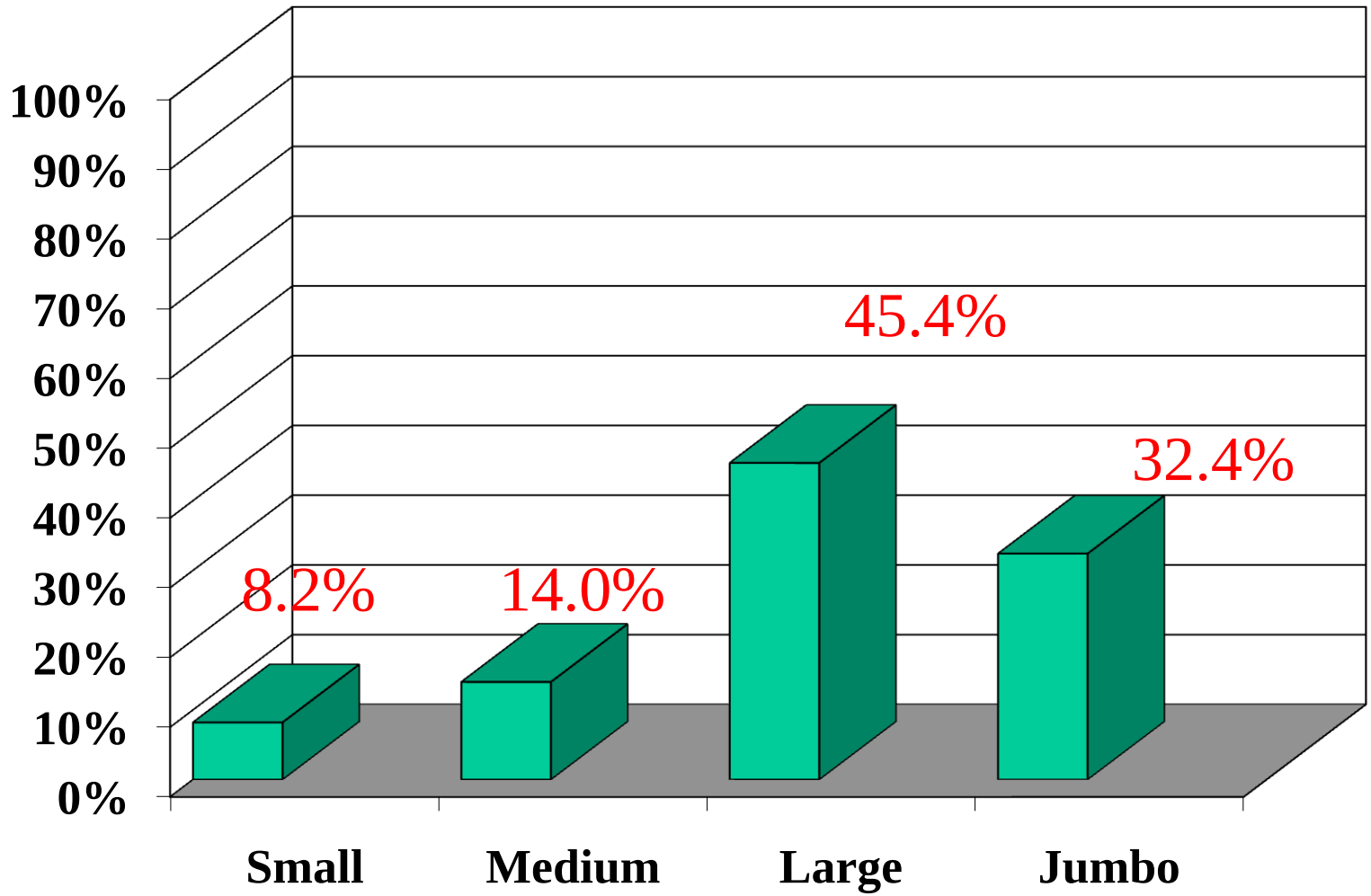
Results of 2010 Lab Sampled Nuts

Lab Size Group	Good Nuts Sampled	Defective Nuts Sampled	Brown Stain Nuts	Percent Defective	Industry Size Groups
Size 1	49	130	0	72.6 %	Small
Size 2	955	485	4	33.7 %	Small
Size 3	1,725	539	6	23.8 %	Medium
Size 4	1,865	487	11	20.7 %	Large
Size 5	2,288	620	12	21.3 %	Large
Size 6	1,440	334	13	18.8 %	Large
Size 7	1,611	411	9	20.3 %	Jumbo
Size 8	2,383	529	23	18.2 %	Jumbo
Totals	12,316	3,535	78	22.3 %	

Brown stain count is included in defective nuts

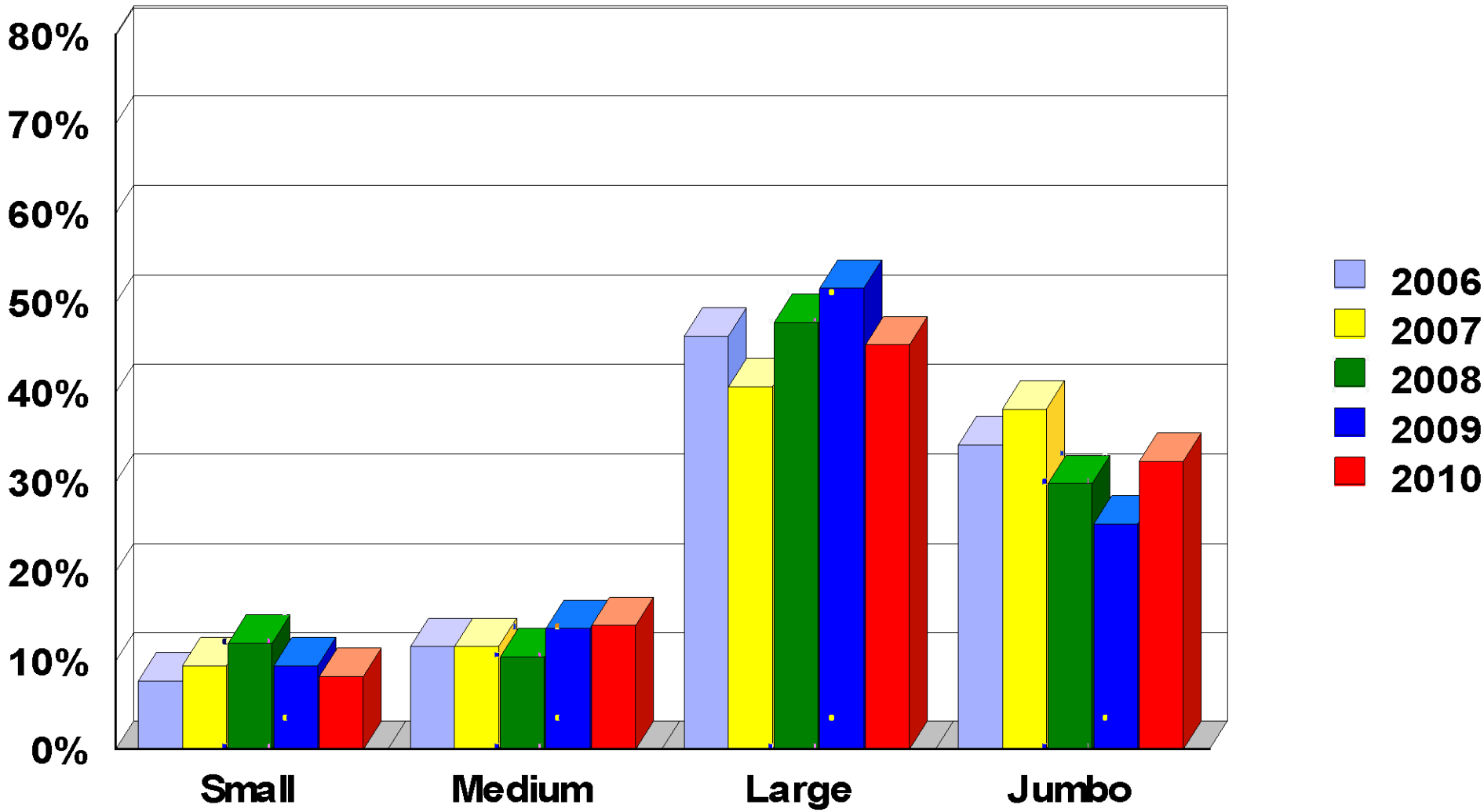
Total nuts sampled = 15,851

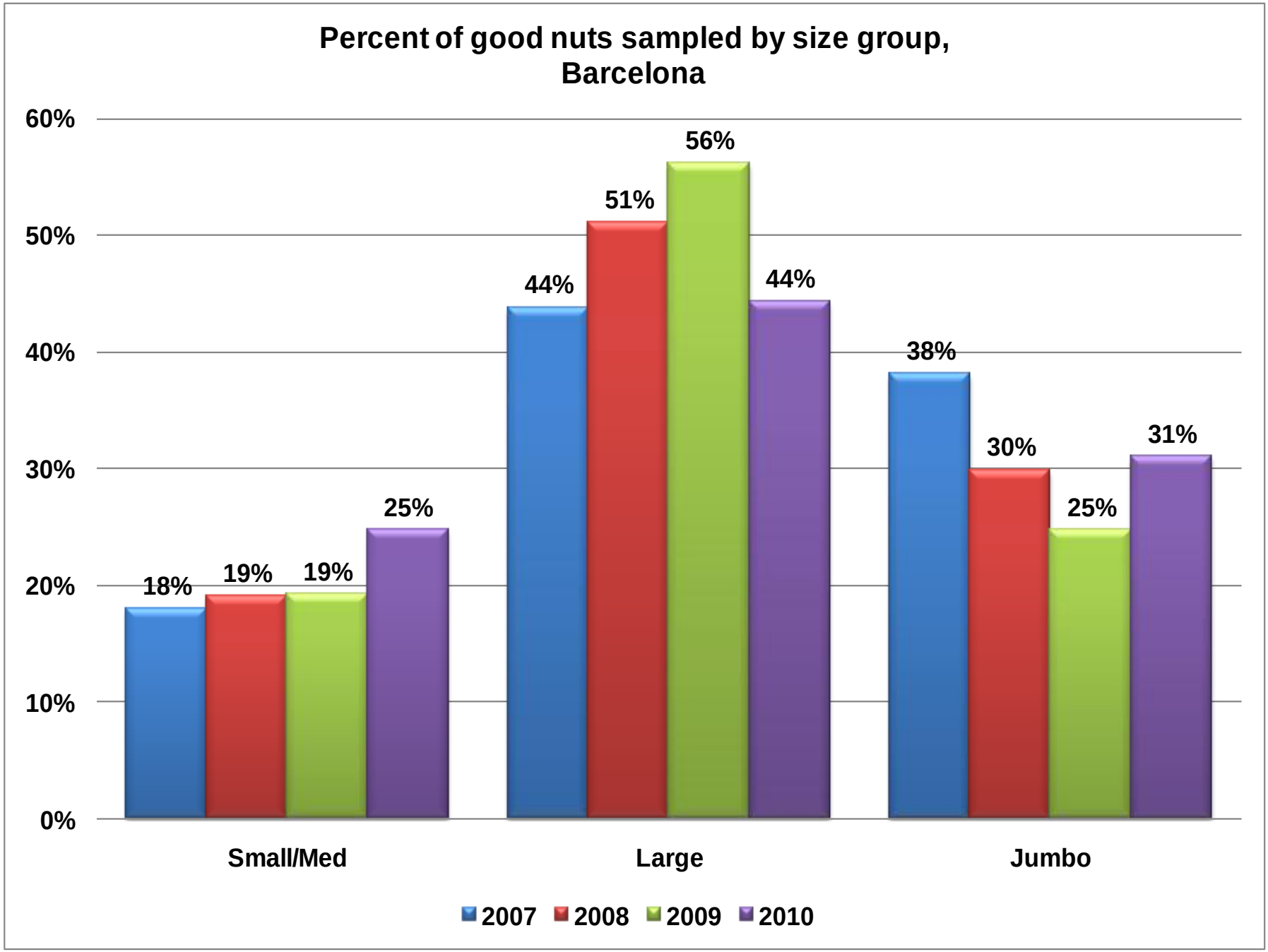
2010 Good Nut Production Percentage by Industry Groupings

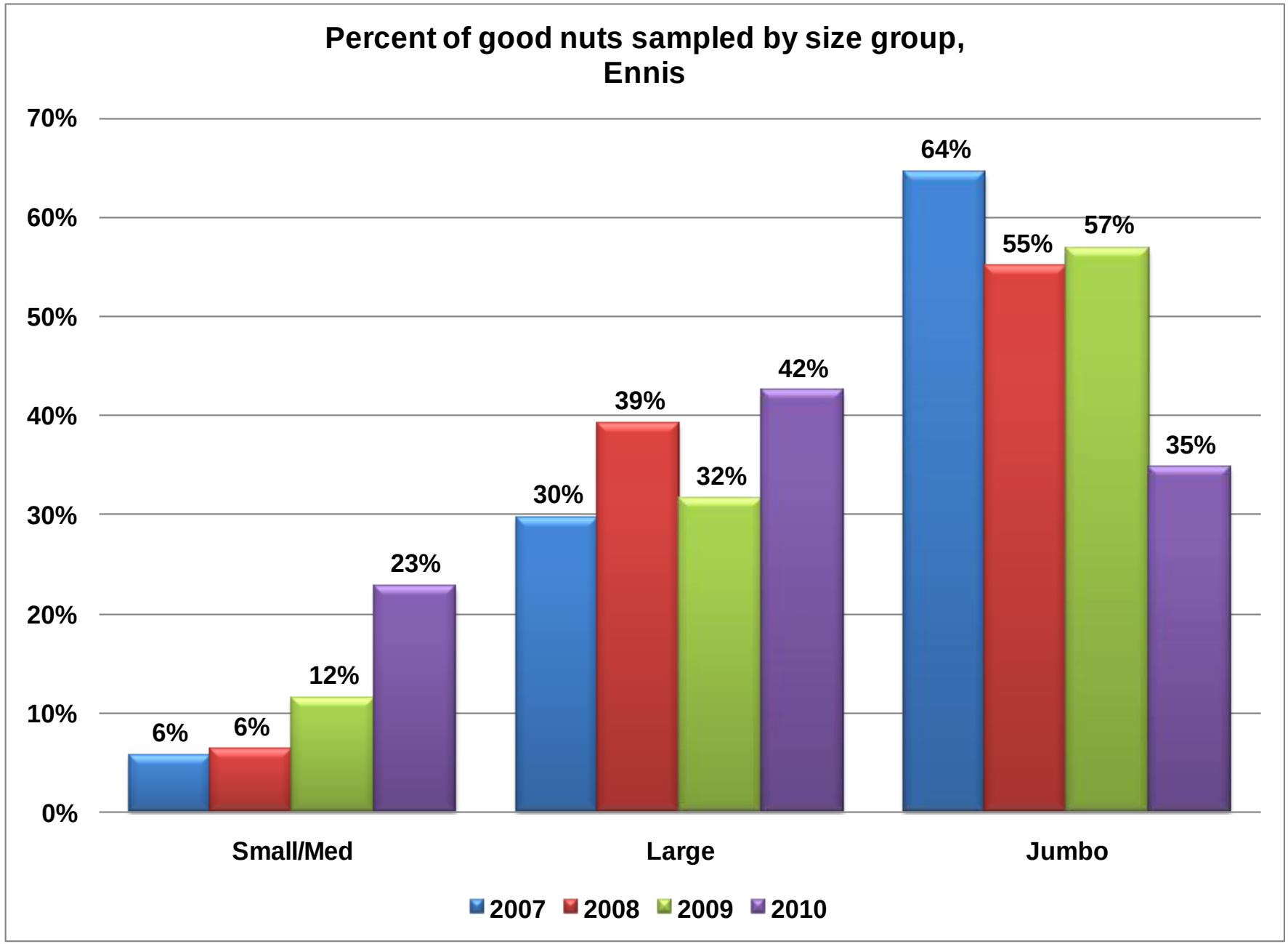


12,316 good nuts sampled in 2010

Percentage of Good Nuts by Size Group, 2006-2010

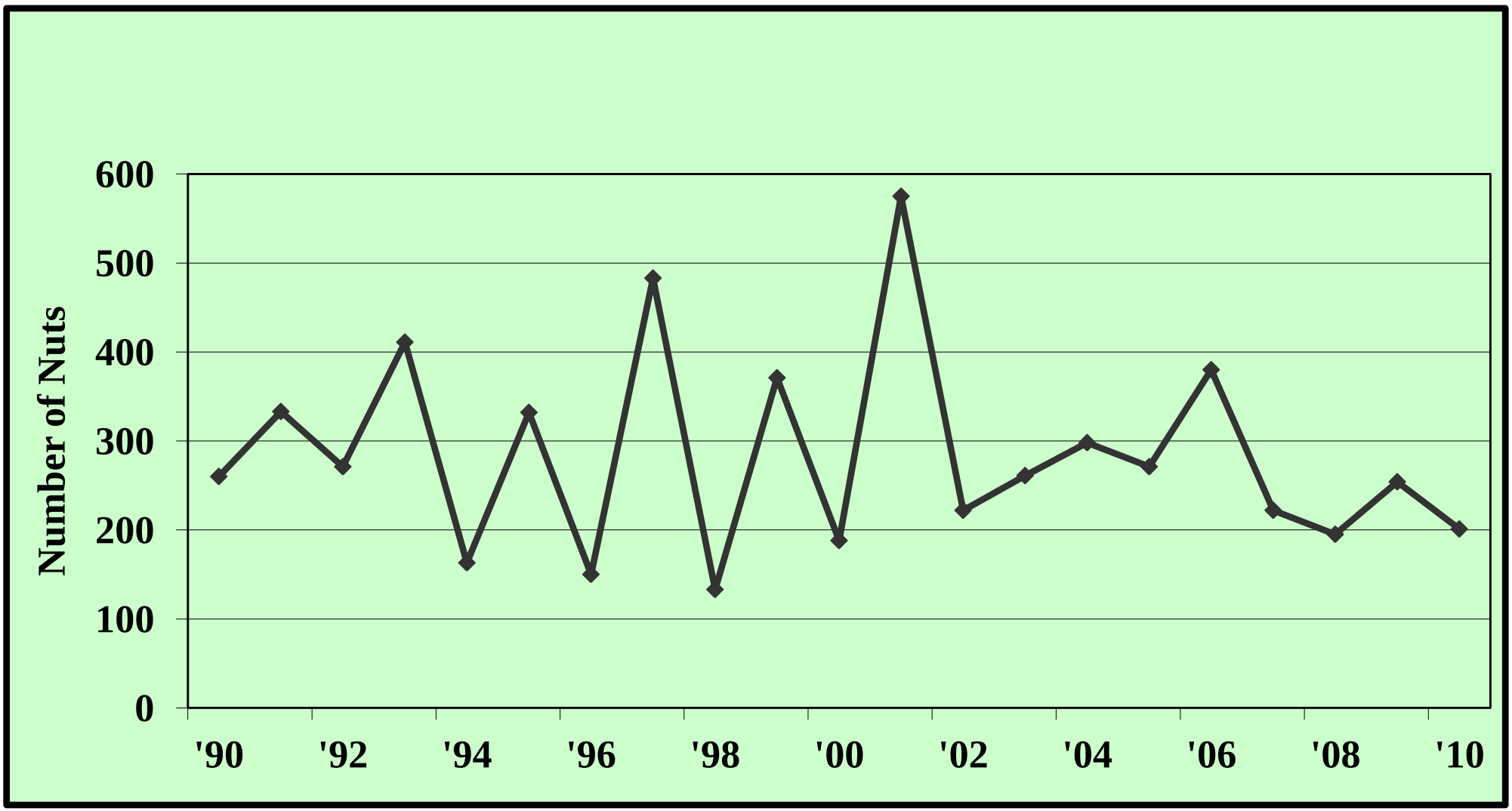


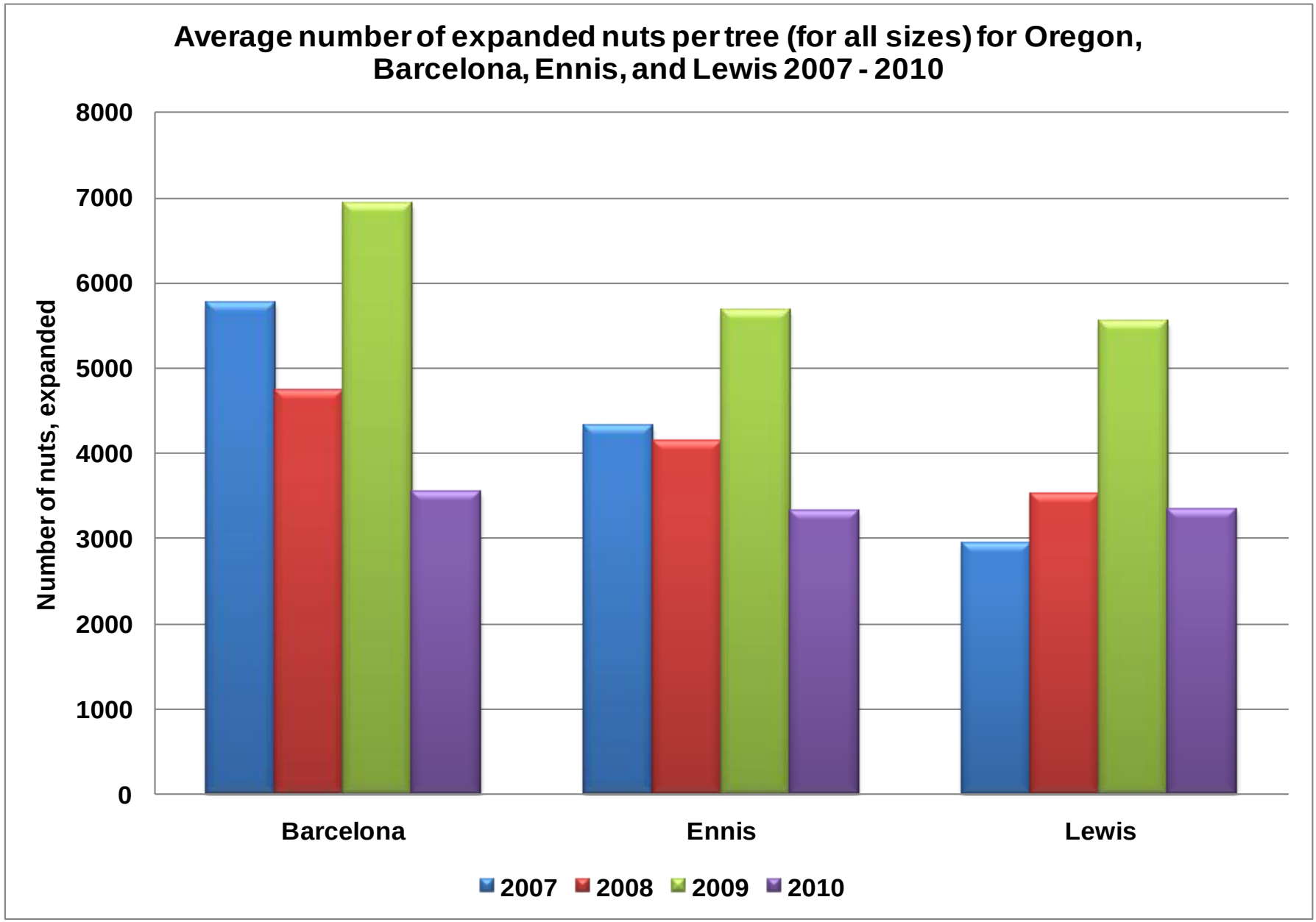

Percent of good nuts sampled by size group, Barcelona
60%
50%
40%
30%
20%
10%
0%
18%
19%
19%
25%
44%
51%
56%
44%
38%
30%
25%
31%
Small/Med
Large
Jumbo
2007
2008
2009
2010


Percent of good nuts sampled by size group, Ennis
70%
60%
50%
40%
30%
20%
10%
0%
6%
6%
12%
23%
30%
39%
32%
42%
64%
55%
57%
35%
Small/Med
Large
Jumbo
2007
2008
2009
2010

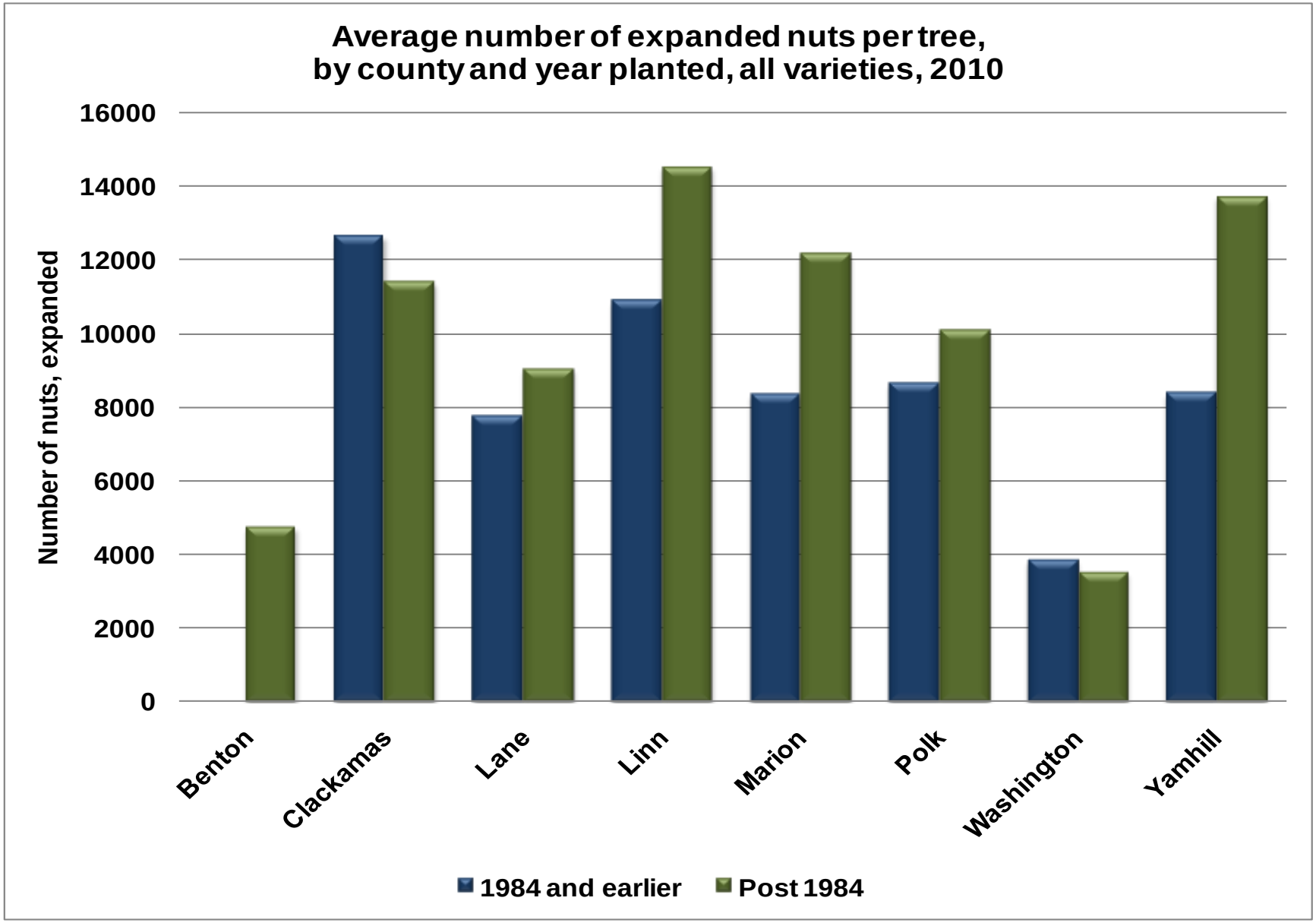
Nuts Picked Per Tree

Hazelnut Objective Yield Lab





1/ The average number of nuts per tree is a calculation. It is the number of good nuts sampled per tree expanded by the number of terminal and primary limbs recorded from each tree.



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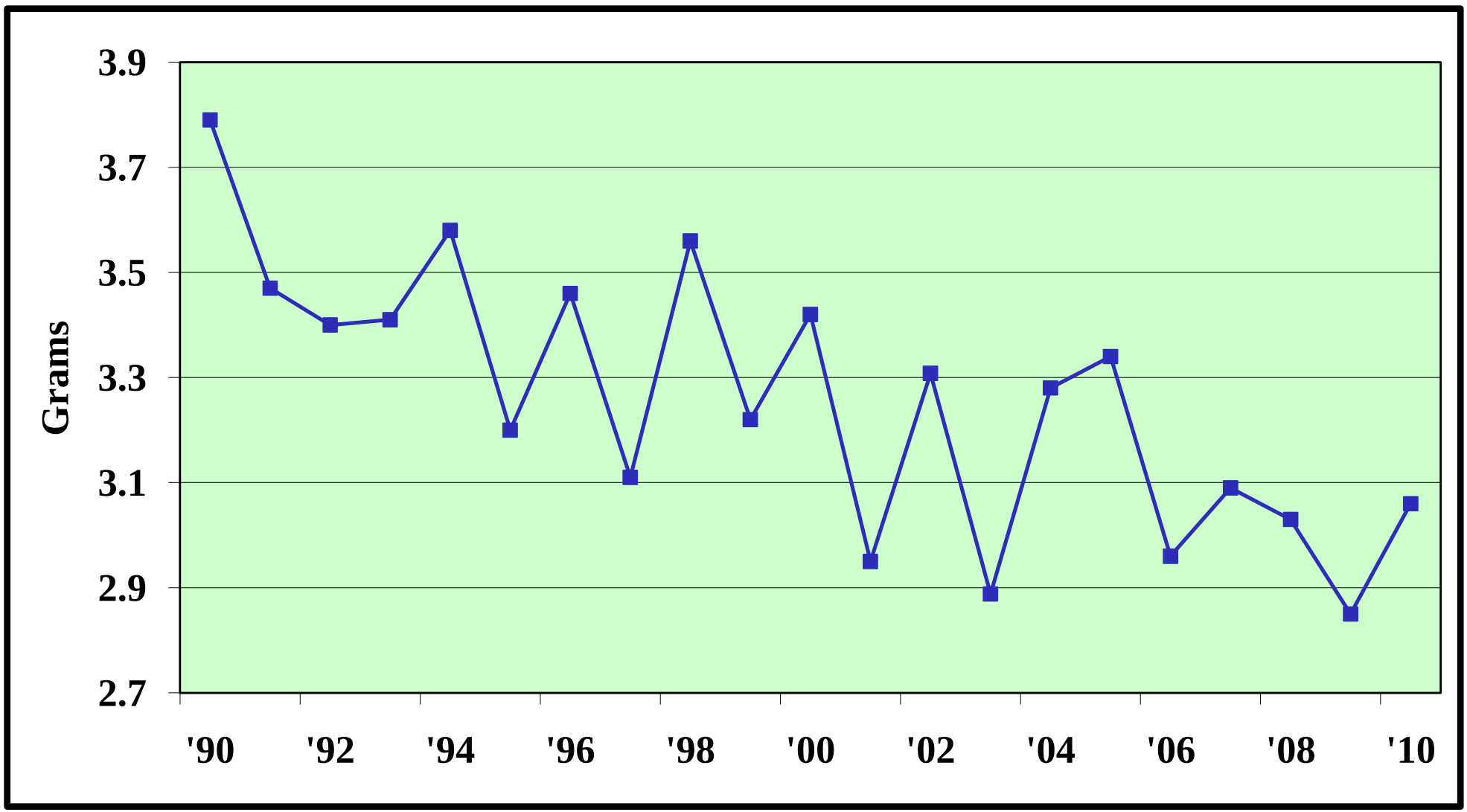
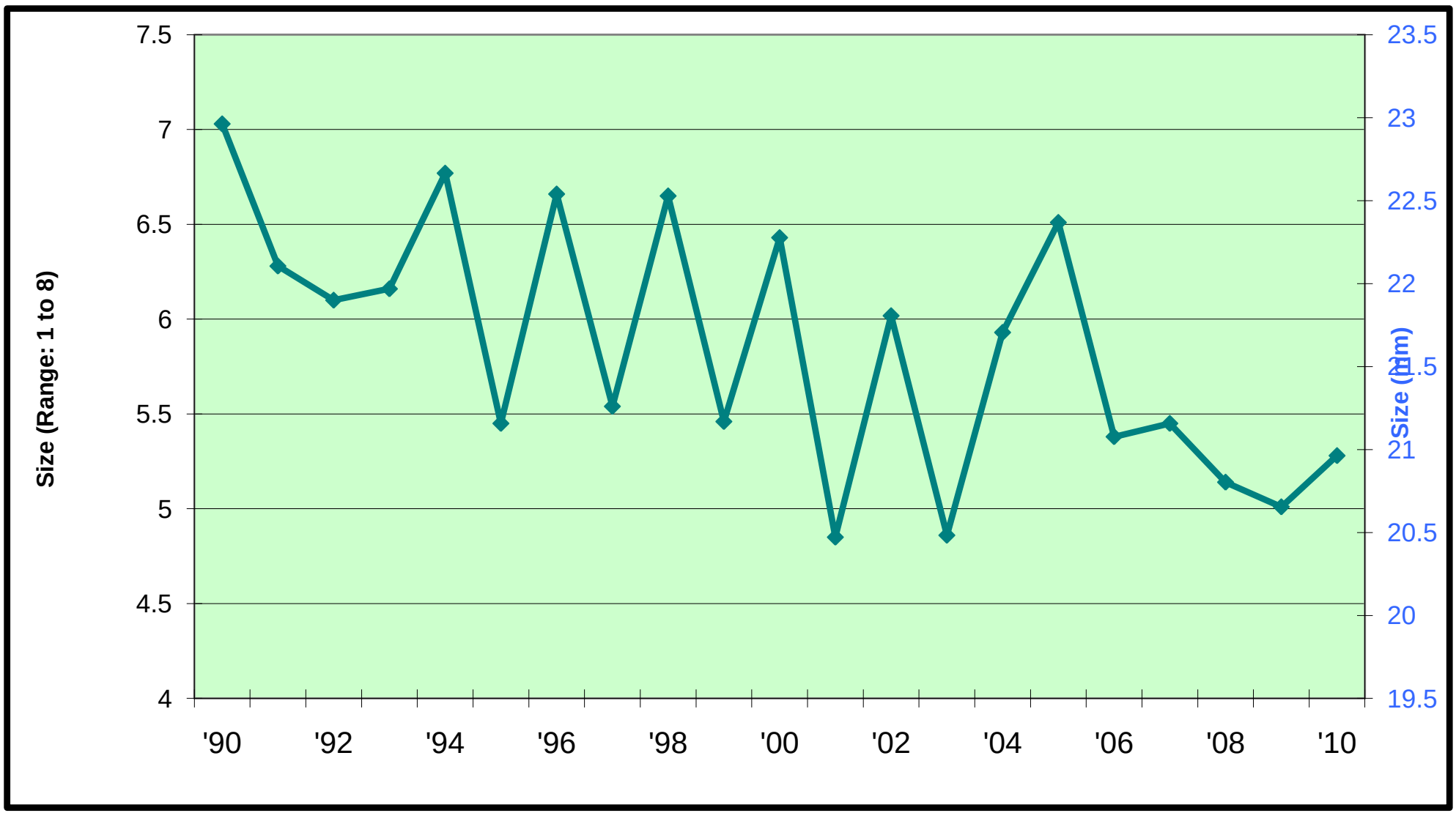
Dry Weight per Good Nut

Hazelnut Objective Yield Lab



Average Nut Size

Hazelnut Objective Yield Lab



Nuts per Tree vs. Nut Size

Thank You

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